

Appl. No. 10/710,278
Docket No. 148115/GEM-0131

REMARKS / ARGUMENTS

Status of Claims

Claims 1-17 are pending in the application and stand rejected. Applicant has canceled Claim 8, and has amended Claims 1 and 14, leaving Claims 1-7 and 9-17 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §112, second paragraph, 35 U.S.C. §102(b), and 35 U.S.C. §103(a), have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 8 and 14-16 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention.

Applicant traverses this rejection for the following reasons.

Applicant submits that where the claims define patentable subject matter with a reasonable degree of particularity and distinctness, the claims should be allowed. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as may be desired. Claims should not be rejected if the expression selected by Applicant satisfies the statutory requirements. In viewing a claim for compliance with 35 U.S.C. §112, second paragraph, the claim as a whole must be considered to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the required notice function. MPEP 2173.02. (Emphasis in the original).

Applicant has canceled Claim 8 and has amended Claims 1 and 14 to include language similar to, and having similar intent to, the language presented in original Claim 8.

Claim 1 now recites, inter alia,

Appl. No. 10/710,278
Docket No. 148115/GEM-0131

"...wherein the coil and shield are configured to have a Q-factor equal to or greater than a defined threshold Q-factor, the defined threshold Q-factor being defined as 50% of the Q-factor that the coil and shield would provide as a result of the shield being made from a sheet of solid copper having a thickness of about three times the skin depth at the Larmor frequency of protons."

Claim 14 now recites, inter alia,

"...wherein the RF field generating means and the RF shielding means are configured to have a Q-factor equal to or greater than a defined threshold Q-factor, the defined threshold Q-factor being defined as 50% of the Q-factor that the RF field generating means and the RF shielding means would provide as a result of the RF shielding means being made from a sheet of solid copper having a thickness of about three times the skin depth at a frequency of about 64 MegaHertz."

In rejecting Claims 8 and 14-16, the Examiner remarks that the conditional wording "if the sheet were made of copper" does not clearly define the invention, and that a person versed in the art would not know the limits of the claimed invention when the sheet material is not made of solid copper. Paper 20050715, page 2.

In response thereto, Applicant has amended the claims to remove the conditional wording, and to include a defined threshold Q-factor that is defined by an arrangement that would be understood by one skilled in the art and that would be reproducible by one skilled in the art, thereby establishing the limits of the claimed invention whether the sheet material were made of copper or any other material. Accordingly, Applicant considers this rejection to be traversed. No new matter has been added as antecedent support may be found in the specification as originally filed, such as at Paragraphs [0021-0022] for example.

In further rejecting Claims 8 and 14-16, the Examiner remarks that the limitation "equal to or greater than about" is considered indefinite. Paper 20050715, page 2.

In response thereto, Applicant has amended the claims to remove the language "equal to or greater than about", thereby obviating this rejection.

Appl. No. 10/710,278
Docket No. 148115/GEM-0131

In yet further rejecting Claims 8 and 14-16, the Examiner remarks that the relationship of a material thickness to the Larmor frequency of protons is vague since the wording "equal to or greater than about" is vague. Paper 20050715, page 2.

In response thereto, Applicant has amended the claims to remove the wording "equal to or greater than about", thereby obviating this rejection.

In view of the foregoing, Applicant respectfully submits that the claimed subject matter is now described in such a manner that reasonably conveys to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, defined the claimed subject matter with a reasonable degree of particularity and distinctness that would be understood by one skilled in the art, and therefore respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §112, second paragraph, which Applicant considers to be traversed.

Rejections Under 35 U.S.C. §102(b)

Claims 1 and 4 stand rejected under 35 U.S.C. §102(b) as being anticipated by Richard et al. (U.S. Patent No. 5,592,087, hereinafter Richard).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, *in a single prior art reference.*" *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the *** claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements "arranged as in the claim." *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Appl. No. 10/710,278
Docket No. 148115/GEM-0131

As discussed above, Applicant has canceled Claim 8 and has amended Claim 1 to now include language similar to that of Claim 8. Claim 4 depends from Claim 1.

In view of Richard not being applied to reject Claim 8 on grounds of anticipation, Applicant agrees that Richard falls short of establishing proper grounds for an anticipation rejection against now amended Claim 1.

In view of the amendment and foregoing remarks, Applicant submits that Richard does not disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

Rejections Under 35 U.S.C. §103(a)

Claims 2 and 3 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Richard in view of Frederick (U.S. Patent No. 5,367,261, hereinafter Frederick).

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Richard in view of Swiet et al. (U.S. Patent Publication No. 2004/0113617, hereinafter Swiet).

Claims 6-7 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Richard in view of Morich et al. (U.S. Patent No. 5,406,204, hereinafter Morich).

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Richard in view of Morich and further in view of Frederick.

Claims 11 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Richard in view of Hayes et al. (U.S. Patent No. 4,642,569, hereinafter Hayes).

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Richard in view of Sugimoto (U.S. Patent No. 4,785,246, hereinafter Sugimoto).

Claim 17 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Richard in view of Morich and further in view of Sugimoto.

Applicant traverses these rejections for the following reasons.

Appln. No. 10/710,278
Docket No. 148115/GEM-0131

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention in such a manner as to perform as the claimed invention performs. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

As discussed above, Applicant has canceled Claim 8 and has amended Claims 1 and 14 to now include language similar to that of Claim 8. Claims 2-13 depend from Claim 1, and Claims 15-16 depend from Claim 14.

In view of the cited References (collectively Richard, Frederick, Swiet, Morich, Hayes and Sugimoto) not being applied to reject Claim 8 on grounds of obviousness, Applicant agrees that the cited References fall short of establishing a *prima facie* case of obviousness with regard to Claims 2-3, 5-7, 9-13, thereby traversing these rejections.

Regarding Claim 13 More Specifically

Claim 13 recites, *inter alia*,

"...wherein the RF shield further comprises *an integrally formed capacitor running lengthwise between the first and second ends*, the capacitor being disposed only partially around the circumference of the cylindrical sheet." Emphasis added.

In rejecting Claim 13, the Examiner cites Sugimoto at column 4, lines 42-56, and Figure 8, in an effort to allege the teaching of an integrally formed capacitor.

In respectful disagreement with the Examiner, Applicant finds Sugimoto as cited to teach "insulating members 54 serve as electrically discontinuous portions 46" (Column 4, lines 42-56, with reference to Figures 7 and 8).

In comparing Sugimoto with the claimed invention, Applicant finds Sugimoto to teach insulating members to define a discontinuous portion 46 that does not run lengthwise between first and second ends (see Figure 7), and not an integrally formed capacitor running lengthwise between the first and second ends.

Appln. No. 10/710,278
Docket No. 148115/GEM-0131

Applicant respectfully submits that an integrally formed capacitor arranged as claimed and performing as the claimed invention performs, is substantially different from the insulating member in Sugimoto.

In view of the foregoing, Applicant respectfully submits that the Examiner has not met the burden of showing where the References teach or suggest each and every element of the claimed invention in such a manner as to perform as the claimed invention performs.

Regarding Claim 17

Claim 17 recites, inter alia,

"...an integrally formed capacitor running lengthwise between the first and second ends, the capacitor being disposed only partially around the circumference of the cylindrical sheet." Emphasis added.

In rejecting Claim 17, the Examiner cites Sugimoto at column 4, lines 42-56, and Figure 8, in an effort to allege the teaching of an integrally formed capacitor, which is the same reasoning that was applied to Claim 13 and discussed above.

In view of Applicant's remarks above regarding Claim 13, Applicant herein applies those same remarks regarding the rejection of Claim 17. That is, Applicant submits that Sugimoto teaches an insulating member that does not run lengthwise between first and second ends, and does not teach or suggest an integrally formed capacitor running lengthwise between the first and second ends, as claimed in the instant invention.

Accordingly, and in view of the foregoing, Applicant respectfully submits that the Examiner has not met the burden of showing where the References teach or suggest each and every element of the claimed invention in such a manner as to perform as the claimed invention performs.

At Paragraph [0025], Applicant discusses the advantages of having an RF shield with overlapping edges and a dielectric material disposed at the overlap and running lengthwise between a first end and a second end of the shield. Applicant finds no

Appin. No. 10/710,278
Docket No. 148115/GEM-0131

discussion in the References relating to such a dielectric arrangement (not just an insulating arrangement) that would motivate one to do only what Applicant has done.

In view of the foregoing, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention and are therefore wholly inadequate in their teaching of the claimed invention as a whole, fail to motivate one skilled in the art to do what the patent Applicant has done, fail to recognize an advantage recognized only by the present invention, fail to offer any reasonable expectation of success in combining the References to perform as the claimed invention performs, and discloses a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §112, second paragraph, 35 U.S.C. §102(b), and 35 U.S.C. §103(a), have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

Appln. No. 10/710,278
Docket No. 143115/GEM-0131


The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 07-0845.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

CANTOR COLBURN LLP

Applicant's Attorneys

By: 

David Arnold
Registration No: 48,894
Customer No. 23413

Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929
Fax: (860) 286-0115